The

32. (New) An iron compound catalyst for inhibiting the generation of dioxin, comprising aggregates comprising iron oxide particles, iron oxide hydroxide particles or the mixture particles thereof and having a specific surface area of not less than 1.2  $\text{m}^2/\text{cm}^3$  when measured under a feed pressure of 1 bar in a dry granulometer, and an average particle size (D50) of 50 % of a total volume thereof, of up to 7.0  $\mu$ m, and

a catalytic activity capable of converting not at least 20 % of carbon monoxide into carbon dioxide when 2.8 x 10<sup>-4</sup> mol of iron oxide particles obtained by heat-treating said iron compound catalyst in air at a temperature of 800°C for 15 minutes, are instantaneously contacted with 6.1 x 10<sup>-7</sup> mol of carbon monoxide at a temperature of 250°C at a space velocity (SV) of 42,400 h<sup>-1</sup> in an inert gas atmosphere using a pulse catalytic reactor,

said iron oxide particles or said iron oxide hydroxide particles having an average particle size of 0.02 to 1.0  $\mu$ m, a BET specific surface area of 0.5 to 100 m<sup>2</sup>/g, a phosphorus content of less than or equal to 0.005 % by weight, a sulfur content of less than or equal to 0.1 % by weight and a sodium content of less than or equal to 0.2 % by weight.

(b)